AMENDMENTS TO THE SPECIFICATION

Please add the following new paragraph at page 1, before the heading "BACKGROUND OF THE INVENTION":

This is a Rule 1.53(b) Divisional Application of Serial No. 10/294,759, filed November 15, 2002 which is a Rule 1.53(b) Continuation Application of Serial No. 09/140,658, filed August 26, 1998.

Please replace the paragraph at page 6, line 8, with the following rewritten paragraph:

As described above, in accordance with the first aspect, since the first and second FM light source elements perform modulating operation by electrical signals having an opposite phase relationship with each other, polarities of the frequency deviation in outputted lightwaves (the first and second optical signals) from the first and second FM light source elements also have an opposite phase relationship with each other. That is, when the first optical signal is deviated to a high frequency side, the second optical signal is deviated to a low frequency side, and on the contrary, when the first optical signal is deviated to a low frequency side, the second optical signal is deviated to a high frequency side. Therefore, in the optical-electrical converting portion, the frequency deviation of a beat signal obtained as a difference signal between these two optical signals is the sum of the frequency deviation of the first optical signal and the frequency deviation of the second optical signal. Therefore, compared to the conventional FM modulator, the frequency deviation of the outputted signal is increased, allowing great improvement in a CNR performance.

Please replace the paragraph at page 10, line 8, with the following rewritten paragraph:

When the first and second FM light sources perform modulating operation by electrical signals whose phases are opposite, the first and second IM-DD components also have an opposite phase relationship with each other. Therefore, in the above fourth aspect, signal power is adjusted at appropriate positions on two propagation routes from the branch portion to the optical-electrical converting portion to equate the magnitudes of the first and second IM-DD components, and these

components are canceled/suppressed in the optical-electrical converting portion. It is thus possible to generate a wide-band FM signal with high quality without an unwanted signal.

Please replace the paragraph at page 12, line 13, with the following rewritten paragraph:

Therefore, in the fifth aspect, in place of the first and second FM light source elements, the first and second optical phase modulating portions are provided with unmodulated light from the first and second light sources, respectively, and then subject the light to optical phase modulation. Since the first and second optical phase modulating portions perform modulating operation by electrical signals whose phases are opposite, polarities of frequency deviation in their outputted lights also have an opposite phase relationship with each other. Therefore, as in the fifth aspect, the frequency deviation of the beat signal obtained as a difference signal between these two optical signals is the sum of the frequency deviation of the outputted light from the first optical phase modulating portion and the frequency deviation of the outputted light from the second optical phase modulating portion. Thus, the frequency deviation of the outputted signal is increased compared to the conventional FM modulator, allowing great improvement in a CNR performance.

Please replace the paragraph at page 19, line 3, with the following rewritten paragraph:

As described above, according to the first embodiment, both of the first and second FM lasers are subjected to modulation by electrical signals which have an opposite phase relationship with each other, and it is thereby possible to expand the frequency deviation of the outputted signal and thus greatly improve the CNR performance.